Capital Region Private Sewage Best Management Practices Study

Project Background

Description

The participating municipalities will investigate shared approaches and best practices that can lead to the development of a common set of administrative procedures to better provide for safe and effective rural wastewater services. In addition, this project will assist local governments in ensuring their growth priorities can be met while harmonizing with regional planning policies.

The project outputs will be:

- Feasibility study regarding the development of regional agreements and process plans for the approval and operation of communal wastewater systems.
- Feasibility study regarding the development of regional agreements that will support the use of shared permitting and inspection resources and best practices.
- A study designed to harmonize project participants' land use and wastewater infrastructure practices with the Capital Region Land Use Plan's rural wastewater policies.
- A study to determine if participating municipalities can make shared amendments to their Quality Management Plans to better provide for more consistent regional wastewater service delivery.

The participating municipalities are Parkland County, Leduc County and Strathcona County. Sturgeon County has not confirmed at the time of this writing. Other municipalities and organizations who are expected to benefit and participate in more limited capacities are Lamont County, Alberta Safety Codes Council, Alberta Capital Region Board, Alberta Capital Region Wastewater Commission, Alberta Environment and Sustainable Resources and region Summer Villages.

Nature of Collaboration

The member municipalities are investigating shared approaches and best practices that can lead to the development of a regional wastewater management decision-making framework to improve the sustainability of existing and the viability of new rural residential developments. This will promote consistent and effective wastewater service delivery levels that will serve the best interests of the environment and landowners while meeting regional land use policies.

Rationale

The Capital Region Board calls upon area municipalities to take shared approaches to land use planning. Some of these approaches guide new rural residential development into clustered growth areas. Also, new perspectives toward traditional rural growth practices are to be considered.

In either case, rural residential developments are expected to densify to help minimize the region's footprint. This may create challenges from a wastewater management perspective that could have further reaching implications on local land use planning.

Municipal Servicing

Capital Region Land Use Policies place emphasis for clustered rural residential development to be serviced by municipal infrastructure:

> *"Such developments shall utilize municipal water and sanitary services. Private communal services may be allowed at the discretion of the municipality".* [1]

This places increased pressure upon private developers to front required infrastructure costs to serve their developments, and municipalities will likely take on management and fiscal responsibilities necessary to maintain that infrastructure.

Such infrastructure maintenance requirements could discourage municipal spending in other priority areas. Also, rural growth serviced through municipal infrastructure could place additional capacity and treatment requirements on current regional treatment facilities.

Communal Wastewater Systems

Municipalities can choose to deploy communal wastewater systems to serve rural residential developments. Although these systems are in use in other parts of Canada and the United States, they are a relatively new concept in Alberta. Some municipal planners and elected officials have expressed hesitancy in making use of these systems because their long-term effectiveness, operational costs, liability issues and other factors are not well understood.

Environmental Protection and Public Safety

Septic systems can be used in traditional rural residential developments as noted in the Capital Region Growth Plan Addendum, October 2009. However, the Addendum states that these developments must follow regional land use principles, which may lead to increased density levels.

Several science-based factors need to be carefully considered in order for private sewage systems to work effectively. Soil types and structures need to be understood, topographical

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[1] Capital Region Land Use Plan, Appendix 2, Page 15

evaluations need to be considered and setback distances from buildings, property lines and water courses must be plotted. When development density levels increase, these factors become more critical.

New Home Buyer Protection Act

Passed earlier this month, the Act states in part that delivery and distribution systems related to plumbing will be covered under warranty for a two year period. However, according to Municipal Affairs Safety Services, it is unclear if private sewage systems will be included as a plumbing distribution system or exempted entirely. If they are included, accredited municipalities may need to place additional consideration upon their permitting and inspection practices. *(Please note that the impact on municipalities and agencies is only speculative at this point. More specifics should be made available in the coming few months.)*

Alignment to Municipal Affairs Mission

> *"Municipal Affairs mission is to help ensure Albertans are served by enduring, collaborative and accountable local governments and live in strong, safe and viable communities. Its core businesses are to support municipalities and their communities and to coordinate and support public safety through the safety codes . . . systems."* [2]

This project furthers the Ministry's mission by supporting accredited member municipalities in the delivery of required safety services functions relating to private sewage systems.

This echoes the 2007 Municipal CAO Survey conducted by Nichols Applied Management:

> *". . . CAOs expressed uncertainty about liability coverage, the thoroughness of safety audits, and the lack of follow-up when deficiencies are reported on audits. Also discussed was the concept of "permit shopping" and differences in service levels . . ."*

Albertans will be better served by this project through the exploration of ways local governments can work together to share resources and best practices that can improve permitting and inspection services for private sewage systems. This will encourage more consistent service levels.

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[2] Alberta Municipal Affairs Business Plan 2012 - 2015

The Importance of Water

Alberta Municipal Affairs Minister Doug Griffiths in his piece *13 Ways to Kill Your Community* writes:

> *"If your desire is to see that your community does not grow and does not succeed, then ensure you don't address the issue of water. It is the most important first step to ensure success. Every community that has been successful has done it, so if you want to fail, ensure water issues are not addressed."*

And in addition:

> *"It is even impossible for a community to grow its capacity without access to enough quality water to service the new households and subdivisions."*

The ability to address wastewater management issues in ways that do not degrade our environment or deter the quality of life for Albertans is crucial to economic and community development. As rural residential growth in the Capital Region becomes increasingly characterized into smaller development footprints, the demands placed on effective wastewater management become increasingly vital.

In this manner, this project addresses more than just land use needs. It provides strategies that promote the sustainability of rural communities.

Solutions and Outcomes

The project will quantify these challenges and opportunities to arrive at working-level solutions that can be shared on a regional basis. These solutions will work toward meeting regional land use planning priorities while helping to ensure that landowners can be serviced responsibly through effective and safe wastewater management processes.